

*U. S. F. C.
Records,*

ORIGINAL LOG BOOK OF THE "FISH HAWK"

UNITED STATES FISH COMMISSION

STATION NUMBERS

Numbers 1078 to 1121

Copy

A,

Stations 1078 to

1078

Astrophyton Agassizii, abdt.
Aleyonium carneum, rare,
Strongylocentrotus Drobach. (1)
Asterias vulgaris
Ctenodiscus crispatus
Leptasterias compla.
Rossia Hyalii
Cyprina Islandica
Fusus decemcostatus

All bearings

Magnetic.

Buccinum undatum
Eupagurus
Pandalus
Ophiopholis aculeata
Mysis,
Solaster endeca 1 large
Sipho Stimpsoni,

TEMPERATURE RECORD.

Instrument used, *Trawl*

Current number of observation, *1078.*

Date, *Aug. 2. 1882*

Locality, *off Cape Cod*

Bearings, *Nausett Beacons*

N. N. 1/4 N. Dist. 10 miles

Time of day, *7.30 A.M.* ; off tide.

State of sky, *b.c.*

Temperature of air, *72.* Sig. serv. Therm.

" surface of water, *63°* N. 3. 47996

" at depth of *5* fathoms, *56°* } 10 f. *40°*

" of bottom, *37.* N. 3. 47995.

Depth, in fathoms, *(53)-55.*

Nature of bottom, *green mud. fine sand*

Direction of surface current, *Wind W. S. W. force 3.*

Force of surface current, *Drift S. by W. 1/2 m.*

Direction of bottom current,

Force of bottom current,

Name of vessel, *Fish Hawk.*

To what service attached, *U. S. F. C.*

Name and rank of commanding officer, *Lieut. J. L. Tanner. U. S. N.*

Name and position of observer, *J. B. Blish Midn. U. S. N.*

1079.

REMARKS.

Heterostichus Agassizii Abbt
Liphs decemcostatus 5.
Cyprina Islandica
Macoma sabulosa
Terebratulina
Saccacora arctica
Glycymeris seliqua
Anomia aculeata
Astarte lens 1 valve
Urticina callosa

TEMPERATURE RECORD.

Instrument used, *Trawl.*
Current number of observation, *1079.*
Date, *Aug. 2, 82.*
Locality, *off Cape Cod.*
Bearings, *Harset Beacon*
N. W. by W. $\frac{1}{2}$ W. $8\frac{1}{4}$ m
Time of day, *8.40* of tide,
State of sky, *b. c.*
Temperature of air, *69.*
“ surface of water, *63.5*
“ at depth of *5* fathoms, *56.5*
“ of bottom, *37.*
Depth, in fathoms, *59-61 $\frac{1}{2}$*
Nature of bottom, *fine sand*
Direction of surface current,
Drift *E. S. E. 1 mile*
Force of surface current,
Direction of bottom current,
Force of bottom current,
Name of vessel,
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

Astrophytum Agassizii, very abdu.
Liphs Deceunostatus.
Agas. *Eupagurus*.
Asterias vulgaris, very large.
Reclen Islandicus.
Laccicava Norvegica
 " *arctica*
Cyprina Islandica
Glycymeris
Cardium Islandicum.
Liphs Stimpsoni
Macoma sabulosa
Buccinum undatum
Apurkaiis occidentalis
Anomia aculeata
Hippasteria phryganea
Lolaster endeca.
Urticina callosa
Polocera mediae.
Ctenodiscus crispatus.
Chalina

TEMPERATURE RECORD.

Instrument used, *Trawl*

Current number of observation, *1080.*

Date, *Aug. 2. 1882*

Locality, *off Cape Cod*

Bearings, *of Anse de Beacons*

N. by N. $\frac{1}{2}$ N. $6\frac{1}{2}$ m

Time of day, *9.40* of tide,

State of sky, *b. c.*

Temperature of air, *69.*

" surface of water, *61.5*

" at depth of *5* fathoms, *56.*

" of bottom, *37.*

Depth, in fathoms, *53-55.*

Nature of bottom, *fine sand*

Direction of surface current,

Force of surface current, *Drift N. by N. 1 mile*

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

1081.

REMARKS.

Cardium Islandicum

Glycymeris piligua

Lipha Islandica

Spisula ovalis

Modiolaria discors.

Pecten Islandicus

Saccicava arctica

Buccinum undatum.

Macoma sabulosa

Lipha decemcostatum.

TEMPERATURE RECORD.

Instrument used, *Trawl*
Current number of observation, *1081.*
Date, *Aug. 2. 1882*
Locality, *off Cape Cod*
Bearings, *Oranget Beacon*
N. by S., 5 1/2 miles
Time of day, *10.50 ; of tide, m.*
State of sky, *b. c.*
Temperature of air, *69.*
" surface of water, *59.*
" at depth of *10 fathoms, 40.*
" of bottom, *39.*
Depth, in fathoms, *32 to 33 1/2*
Nature of bottom, *Coarse gravel & pebbles*
Direction of surface current,
Drift
Force of surface current, *N. N. by N. 1 m*
Direction of bottom current,
Force of bottom current,
Name of vessel,
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

1082.

REMARKS.

Glycymeris deliqua
Spisula ovalis
Modiola modiolus

TEMPERATURE RECORD.

Instrument used, *Trawl*
Current number of observation, *1082*
Date, *Aug. 2. 1882*
Locality, *Off Cape Cod*
Bearings, *Cape Cod Light. N. W.
3/4 N., 1 1/2 miles*
Time of day, *11.45* *Low tide,*
State of sky, *b. c.*
Temperature of air, *70°*
" surface of water, *59*
" at depth of fathoms,
" of bottom, *40.*
Depth, in fathoms, *27 - 28.*
Nature of bottom, *Coarse gravel*
Direction of surface current,
Force of surface current, *with N. W. by N. 1/4 m.*
Direction of bottom current,
Force of bottom current,
Name of vessel,
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

1083,

REMARKS.

Cyprina Islandica
Appachais occidentalis
Glycymeris siliqua
Sepia stimpsoni
Pecten Islandicus
Lepeta caeca?
Eupagurus
Steller endeca.

TEMPERATURE RECORD.

Instrument used,

Trawl

Current number of observation,

1083.

Date,

Aug. 2, 1882

Locality,

Off Cape Cod

Bearings,

Cape Cod Light

N. by N.

15 miles

Time of day, 12.45; of tide,

Low

State of sky,

b. c.

Temperature of air,

77.

"

surface of water,

64

"

at depth of 10 fathoms,

42

"

of bottom,

38.

Depth, in fathoms,

80 - 83 1/2

Nature of bottom,

Direction of surface current,

North

Force of surface current,

N. S. W. 1/2 m

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

Walter H. Smith

1084,

REMARKS.

Pentacta prosopea, very large.
Polocera Tuediae.
Pandalus leptoceros?
etcas.
Belemn Islandicus.
Spisula ovalis
Glycymeris heligua
Cyprina Islandica
Lipho Stimpsoni
Belemn tenuicostatus
Eupagurus
Balanus porcellus?
Anomia aculeata
Dolaster endeca.
Asterias vulgaris.
Hippasteria phryganea
Septasterias compla

TEMPERATURE RECORD.

Instrument used,

Trawl

Current number of observation,

1084

Date,

Aug. 2. 1882

Locality,

Off Cape Cod

Bearings,

Cape Cod Light

3 hr. N. W., 3/4 hr., 8 miles

Time of day,

2.20 P.M.

State of sky,

b.c.

Temperature of air,

78.

"

surface of water,

62.5

"

at depth of 10 fathoms,

43.5

"

of bottom,

38.

Depth, in fathoms,

36-37 1/2

Nature of bottom,

Coarse sand

Direction of surface current,

Force of surface current,

Drift

N. 1/2 W. 1 mile

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Asporophyton Agassizii, var. abdt.
Pandalus.
Strongylocentrotus Drobach.
Aleyonium carneum
Eupagurus
Asterias vulgaris
Leptasterias Compta.
Cribrella sanguinolenta
Hippasteria phrygiana
Solaster endeca
Cyprina Islandica
Cardium Islandicum
Lacuna arctica
Buccinum undatum
Septa Stimpsoni
Glycymeris siliqua
Pecten uniostratus
Astarte lens,
Spisula ovalis,
Mytilus occidentalis
Pecten Islandicus

TEMPERATURE RECORD.

Instrument used,

Trawl

Current number of observation,

1085.

Date,

Aug. 3, 1882

Locality,

off Cape Cod

Bearings,

Race Point Light

S. 33° E.

2 miles.

Time of day,

6.15 a.m.

State of sky,

b, c,

Temperature of air,

64,

"

surface of water,

64,

"

at depth of

5

fathoms,

61, 10 fms 43,

"

of bottom,

39

Depth, in fathoms,

33-34 1/2

Nature of bottom,

fine sand, green mud

Direction of surface current,

light

Force of surface current,

S. by E

1 mile

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

1086,

REMARKS.

Astrophyton Agassizii ^{Canimense} *Quantities*
Asclepias vulgaris.
Pandalus leptoceros.
Ophiopholis aculeata
Leptasterias Compta
Solaster endeca
Cribrella sanguinolenta
Alcyonium Carneum.
Pentacta pendora, 1 large.
Lipho decemcostatus
Modiolar modiola
Cardium Islandicum
Spisula ovalis
Cyprina Islandica
Psella Islandicum
Margarita obscura
Dorsanella arctica
Pennelluella Noachina
Velutina halictoides

TEMPERATURE RECORD.

Instrument used, *Trawl*
 Current number of observation, *1086*,
 Date, *Aug. 3, 1882*
 Locality, *off Cape Cod*
 Bearings, *Race Pt. Light*
S. 20° W., 2 3/4 miles
 Time of day, *7 am*; of tide,
 State of sky, *b. c.*,
 Temperature of air, *74*,
 " surface of water, *64*,
 " at depth of *10* fathoms, *44*,
 " of bottom, *39 1/2*
 Depth, in fathoms, *33-34*,
 Nature of bottom, *fine sand*.
 Direction of surface current,
~~Force of surface current,~~ *S. 3/4 mile*
 Direction of bottom current,
 Force of bottom current,
 Name of vessel,
 To what service attached,
 Name and rank of commanding officer,
 Name and position of observer,

1087.

REMARKS.

Hippasteria phrygiana
Agas.

Pandalus

Polonia Thedæ

" *multicornis*

Hydroids.

Bryozoa.

Oribrella sanguinolenta

Rossia

Sipho decemcostatus

Cardium Islandicum

Spisula ovalis.

Gyprina Islandica

Pelecus tenuicostatus

Depota coeca.

Panucara arctica

TEMPERATURE RECORD.

Instrument used,

Trawl

Current number of observation,

1087.

Date,

Aug. 3, 1882

Locality,

off Cape Cod

Bearings,

Cape Cod light

S. S. W. 7 miles

Time of day,

8.30 (a.m.)

State of sky,

b.c.

Temperature of air,

84.

"

surface of water,

62.5

"

at depth of

5

fathoms,

46, 10 fms. 41.

"

of bottom,

39.

Depth, in fathoms,

42-44.

Nature of bottom,

gray sand

Direction of surface current,

~~Force of surface current,~~

drift

N. S. W. 1/2 m

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

Asporrhais occidentalis
Leptodea decemcostatus
Terebratulina septen.
Buccinum undatum
Cardium Islandicum
Recler "
 " *lenuicostatus*
Astarte lens
Cyprina Islandica
Dacrydium ~~arctica~~ ^{Norvegica}
Anomia aculeata
Lunatia
Natica Clausa
Macoma sabulosa
Modiolaria discors.
 3 Cephalopods.
Urticina nodosa
Polocera Fredrica.
 " *multicornis.*
Pandalus borealis
Hippasteria
Volaster, Porania,
Cribrella sanguinolenta
Sponges, Ophiopholis aculeata
Hippolyte, Hydroids, Bryozoa,

TEMPERATURE RECORD.

Instrument used, *Trawl*
Current number of observation, *1088*
Date, *Aug. 3, 1882*
Locality, *off Cape Cod*
Bearings, *Cape Cod Light*
S. 17. 3/4 W. 9 1/2 miles
Time of day, *9.50* ; of tide, *low*
State of sky, *b. c.*
Temperature of air, *82.5*
“ surface of water, *62*
“ at depth of *5* fathoms, *59.5*
“ of bottom, *38.*
Depth, in fathoms, *86-90*
Nature of bottom, *Coarse sand*
Direction of surface current,
10 mph
Force of surface current, *N. W. 1 1/2 miles*
Direction of bottom current,
Force of bottom current,
Name of vessel,
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

REMARKS.

TEMPERATURE RECORD.

Instrument used,

Trawl

Current number of observation,

1089

Date,

Aug. 3, 1882

Locality,

off Cape Cod

Bearings,

Cape Cod Light

S. 77. $\frac{3}{4}$ W. 14 miles

Time of day,

11.10; of tide, ebb

State of sky,

b. c.

Temperature of air,

78.

"

surface of water,

63.

"

at depth of

fathoms,

"

of bottom,

38.5

Depth, in fathoms,

106-110.

Nature of bottom,

grey mud

Direction of surface current,

Drift

Force of surface current,

dr. W. by W. $\frac{3}{4}$ m

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

Water haul

1090.

REMARKS.

Ap porhais occidentalis
Laccaria Norvegica
Salicet. Lns.

Gordia Thraciformis
Pecten Islandia

Mya truncata

Sipho pygmaea

Stentalium striolatum

" *occidentalis*

Gordia capatella

Naera arctica

Cardium pinnulatum

Leda tenuisulcata

Naera sp.

TEMPERATURE RECORD.

Instrument used,

Trawl

Current number of observation,

1090

Date,

Aug. 3. 1882

Locality,

Off Cape Cod

Bearings,

Cape Cod Light

S. W. $31\frac{1}{2}$ N. 13 $\frac{3}{4}$ miles

Time of day, 11, 50 : of tide,

am

State of sky,

b. c.

Temperature of air,

81, 5

"

surface of water,

62

"

at depth of 5 fathoms,

56, 10 fms 52,

"

of bottom,

38, 5

Depth, in fathoms,

106 = 110,

Nature of bottom,

gray mud

Direction of surface current,

~~Force of surface current.~~ Drift

N. S. W. 1 mile

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

1091,

REMARKS.

Archaster Americanus, very abt.
Pandanus,

TEMPERATURE RECORD.

Instrument used, *Trawl*
Current number of observation, *1091.*
Date, *Aug. 11. 1882.*
Locality, *Off Martha's Vineyard*
Bearings, *Lat. 40° 03' N*
Long. 69° 44' W.
Time of day, *5.30*; of tide, *in*
State of sky, *b. c.*
Temperature of air, *77.*
" surface of water, *75.*
" at depth of *10* fathoms, *62.*
" of bottom, *46.*
Depth, in fathoms, *62 = 65 fms.*
Nature of bottom, *gray sand & broken shells*
Direction of surface current, *drift*
Force of surface current, *N. W. by W. 1/2 mile*
Direction of bottom current,
Force of bottom current,
Name of vessel,
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

1092.

REMARKS.

Archaeolites Florae.
Pennatulā aculeata
Ambodon.
Eupagurus.
Pandalus.
Warm lakes.
Schizaster fragilis

TEMPERATURE RECORD.

Instrument used, *Trawl*
Current number of observation, *1092*
Date, *Aug. 11, 1882*
Locality, *off Martha's Vineyard*
Bearings, *Lat 39° 58' N.*
Long. 69° 42' W.
Time of day, *6.54 A.M. of tide,*
State of sky, *b. c.*
Temperature of air, *79*
" surface of water, *75*
" at depth of fathoms,
" of bottom, *41.*
Depth, in fathoms, *194 = 202.*
Nature of bottom, *gray sand*
Direction of surface current,
revert
Force of surface current, *N. N. W. 3/4 m*
Direction of bottom current,
Force of bottom current,
Name of vessel,
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

REMARKS.

TEMPERATURE RECORD.

Instrument used, *Trawl*
 Current number of observation, *1093*
 Date, *Aug. 11, 1882*
 Locality, *Off Martha's Vineyard*
 Bearings, *Lat 39° 56' 00" N.*
Long 69° 45' - W
 Time of day, *8, 35 a.m. tide;*
 State of sky, *b. c.*
 Temperature of air, *82*
 " surface of water, *75.*
 " at depth of fathoms,
 " of bottom, *40.*
 Depth, in fathoms, *356 = 349*
 Nature of bottom, *Sand & blue mud*
 Direction of surface current,
 Force of surface current, *Drift N. N. W., 1 mile*
 Direction of bottom current,
 Force of bottom current,
 Name of vessel,
 To what service attached,
 Name and rank of commanding officer,
 Name and position of observer,

REMARKS.

TEMPERATURE RECORD.

Instrument used, *Deep Sea Trawl*
 Current number of observation, *1094.*
 Date, *Aug. 11, 1882*
 Locality, *Off Martha's Vineyard*
 Bearings, *Lat. 39° 57' N*
Long. 69° 47' W
 Time of day, *10.10*; of tide, *mean*
 State of sky, *b. c.*
 Temperature of air, *84.*
 " surface of water, *76*
 " at depth of fathoms,
 " of bottom, *40.*
 Depth, in fathoms, *301.*
 Nature of bottom, *blue mud*
 Direction of surface current,
 Name of surface current, *Drift N. W. by N. 1 mile*
 Direction of bottom current,
 Force of bottom current,
 Name of vessel,
 To what service attached,
 Name and rank of commanding officer,
 Name and position of observer,

REMARKS.

TEMPERATURE RECORD.

Instrument used, *Deep Sea Trawl*
Current number of observation, *1095.*
Date, *Aug. 11, 1882*
Locality, *off Martha's Vineyard*
Bearings, *Lat. 39° 55' 28" N.*
Long. 69° 47' 00" W.
Time of day, *11.55 AM* of tide,
State of sky, *b. c.*
Temperature of air, *82*
" surface of water, *76.*
" at depth of fathoms,
" of bottom, *40.*
Depth, in fathoms, *321.*
Nature of bottom, *soft green mud*
Direction of surface current,
~~Force of surface current,~~ *Drift, N. N. W. 1/2 W. 3/4 m*
Direction of bottom current,
Force of bottom current,
Name of vessel,
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

REMARKS.

TEMPERATURE RECORD.

Instrument used,

Trawl.

Current number of observation,

1096.

Date,

Aug. 11. 1882

Locality,

off Martha's Vineyard

Bearings,

Lat. $39^{\circ} 53' N.$

Long. $69^{\circ} 47' W$

Time of day,

1.39 P.M. of tide,

State of sky,

b.c.

Temperature of air,

78.

"

surface of water,

75.5

"

at depth of

fathoms,

"

of bottom,

40.

Depth, in fathoms,

317.

Nature of bottom,

green mud

Direction of surface current,

Force of surface current,

Drift.

N. N. W. $\frac{1}{2}$ mile

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

TEMPERATURE RECORD.

Instrument used, *Trawl*
Current number of observation, *1097*
Date, *Aug 11 1882*
Locality, *Off Martha's Vineyard*
Bearings, *Lat 39° 54' N.*
Long 69° 44' W
Time of day, *3.10 P.M.*
State of sky, *b.c.*
Temperature of air, *76.*
" surface of water, *75.5*
" at depth of fathoms,
" of bottom, *45.*
Depth, in fathoms, *158.*
Nature of bottom, *fine sand*
Direction of surface current,
Drift
Force of surface current, *N. 1/2 W. 1/2 mile*
Direction of bottom current,
Force of bottom current,
Name of vessel,
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

REMARKS.

TEMPERATURE RECORD.

Instrument used, *Trawl*
 Current number of observation, *1098*
 Date, *Aug. 11, 1882*
 Locality, *off Martha's vineyard*
 Bearings, *Lat. 39° 53' N.*
Long. 69° 43.7'
 Time of day, *4.35 P.M.*, of tide,
 State of sky, *b. c.*
 Temperature of air, *78.*
 " surface of water, *75.*
 " at depth of fathoms,
 " of bottom, *43, 5*
 Depth, in fathoms, *156.*
 Nature of bottom, *fine sand*
 Direction of surface current,
 Force of surface current, *Drift N. by E. 3/4 mile*
 Direction of bottom current,
 Force of bottom current,
 Name of vessel,
 To what service attached,
 Name and rank of commanding officer,
 Name and position of observer,

REMARKS.

TEMPERATURE RECORD.

Instrument used, *Trawl*
Current number of observation, *1099*
Date, *Aug. 18th 1882*
Locality, *Vineyard Id.*
Bearings, *Stobeca Pt Light*
N. S. W. $\frac{1}{4}$ W. 1578 miles.
Time of day, *11.06; of tide, ebb*
State of sky, *b. c.*
Temperature of air, *76.*
" surface of water, *72*
" at depth of fathoms,
" of bottom, *71.5*
Depth, in fathoms, *6.*
Nature of bottom, *Sand. gravel.*
Direction of surface current,
Force of surface current, *1.5 mph. N. E. by N. $\frac{1}{2}$ W.*
Direction of bottom current,
Force of bottom current,
Name of vessel,
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

REMARKS.

TEMPERATURE RECORD.

Instrument used, *Trawl*
Current number of observation, *1100.*
Date, *Aug. 18. 1882.*
Locality, *Vineyard Id*
Bearings, *of Pt. Light*
N. S. W. 74° W. $1\frac{1}{4}$ miles
Time of day, *11.47 A.M.* of tide,
State of sky, *b. c.*
Temperature of air, *77.*
" surface of water, *72.*
" at depth of fathoms,
" of bottom, *71.5*
Depth, in fathoms, *4 $\frac{3}{4}$.*
Nature of bottom, *Sand. Gravel. Shells*
Direction of surface current,
Force of surface current, *W. E. by N. $\frac{1}{2}$ mi*
Direction of bottom current,
Force of bottom current,
Name of vessel,
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

REMARKS.

TEMPERATURE RECORD.

Instrument used, *Trawl*
Current number of observation, *1101*
Date, *Aug. 18, 1882*
Locality, *Vineyard Id.*
Bearings, *Abokak Pt Light*
N. by S. 1 1/2 miles.
Time of day, *12.15 PM*
State of sky, *b.c*
Temperature of air, *78*
" surface of water, *72*
" at depth of fathoms,
" of bottom, *71*
Depth, in fathoms, *5*
Nature of bottom, *shells*
Direction of surface current,
Draft
Force of surface current, *N. E. 1 m.*
Direction of bottom current,
Force of bottom current,
Name of vessel,
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

REMARKS.

TEMPERATURE RECORD.

Instrument used, *Trawl*
Current number of observation, *1102*
Date, *Aug. 18. 1882*
Locality, *Vineyard Id*
Bearings, *East Chop Light*
N. W. $3\frac{1}{4}$ W. 2\frac{1}{2} miles
Time of day, *1, 10 PM*, of tide,
State of sky, *b. c.*
Temperature of air, *73.*
" surface of water, *70*
" at depth of fathoms,
" of bottom, *69.*
Depth, in fathoms, *5,*
Nature of bottom, *Coarse sand*
Direction of surface current,
~~Force of surface current,~~ *Drift. E by S. $\frac{1}{2}$ m*
Direction of bottom current,
Force of bottom current,
Name of vessel,
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

REMARKS.

TEMPERATURE RECORD.

Instrument used, *Trawl*
Current number of observation, *1103.*
Date, *Aug. 18. 1882*
Locality, *Vineyard Id.*
Bearings, *East Chop. Light*
N. W. by W. 2 3/4 m
Time of day, *1.42 P.M.*
State of sky, *O.C.*
Temperature of air, *70.*
" surface of water, *70.*
" at depth of fathoms,
" of bottom, *69.*
Depth, in fathoms, *5.*
Nature of bottom, *Coarse sand*
Direction of surface current,
~~Force of surface current.~~ *W. by S. 1/4 m*
Direction of bottom current,
Force of bottom current,
Name of vessel,
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

REMARKS.

TEMPERATURE RECORD.

Instrument used, *Trawl*

Current number of observation, *1104,*

Date, *Aug. 18, 1882*

Locality, *Vineyard Id.*

Bearings, *East Chop Light.*

N. N. W. 1/2 W. 4 miles

Time of day, *2:12 P.M.*

State of sky, *b.c.*

Temperature of air, *79.*

" surface of water, *70*

" at depth of fathoms,

" of bottom, *69.*

Depth, in fathoms, *8 1/2*

Nature of bottom, *Shells*

Direction of surface current,

Force of surface current,

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.

TEMPERATURE RECORD.

Instrument used, *Trawl*
Current number of observation, *1105*
Date, *Aug. 18. 1882*
Locality, *Vineyard Id.*
Bearings, *Cape Poge Light*
S. by W. 4 miles
Time of day, *3 PM*, of tide,
State of sky, *b, c*
Temperature of air, *80.*
" surface of water, *72*
" at depth of fathoms,
" of bottom, *7 f.*
Depth, in fathoms, *10.*
Nature of bottom, *Coarse sand*
Direction of surface current,
Drift N. E x E. 1/2 E. 2 miles
Force of surface current,
Direction of bottom current,
Force of bottom current,
Name of vessel,
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

1106

REMARKS.

1.0227

72

1.0227

72

TEMPERATURE RECORD.

Instrument used, *Trawl*

Current number of observation, *1106*

Date, *Aug 18 1882*

Locality, *Vineyard Sound*

Bearings, *Light House S't. House*

S x N 1/2 N 5 1/2 miles

Time of day, *9.35* : of tide, *beginning of night*

State of sky, *bc*

Temperature of air, *80*

" surface of water, *79 1/2*

" at depth of fathoms,

" of bottom, *72*

Depth, in fathoms, *5*

Nature of bottom, *sand & shells*

Direction of surface current, *N. E. Force 3*

~~Force of surface current,~~ *Drift N. E. x N 1/4 mile.*

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

1107

REMARKS.

Specific Gravity

Surface	1.0244	67
5 fms	44	67
10 fms	43	68

Trawl over 6.12 down 6.25
hauled in 6.46 up 6.54
220 fms. out

Water haul

TEMPERATURE RECORD.

Instrument used, *Trawl (came up empty)*
 Current number of observation, *11.07*
 Date, *Aug. 22 1882*
 Locality, *Off North's Vineyard*
 Bearings, *Lat 40°-02' N*
Long. 71°-35' W
 Time of day, *6.55 A.M.* of tide.
 State of sky, *bc*
 Temperature of air, *69 1/2*
 " surface of water, *71*
 " at depth of *5* fathoms, *71 1/2 10 fms 66*
 " of bottom, *48*
 Depth, in fathoms, *116*
 Nature of bottom, *grey mud*
 Direction of surface current, *W. S. W. Force 2*
Drift *N. W. 1'*
 Force of surface current.
 Direction of bottom current,
 Force of bottom current,
 Name of vessel,
 To what service attached,
 Name and rank of commanding officer,
 Name and position of observer,

1108

REMARKS.

Specific Gravities

Surface 1.0049 67

5 fms 42 68

10 fms 42 68

Trawl over 6.56 down 7.07

heaving in 7.27 up 7.50

3.57 fms. out.

TEMPERATURE RECORD.

Instrument used, *Trawl*

Current number of observation, *1108*

Date, *Aug. 22 1882*

Locality, *Off Martha's Vineyard*

Bearings, *Lat. 40° - 02' N*
Long. 70° - 37' 30" W

Time of day, *6.55* ; of tide,

State of sky, *bc*

Temperature of air, *69 1/2*

" surface of water, *71*

" at depth of fathoms,

" of bottom, *418*

Depth, in fathoms, *1001*

Nature of bottom, *grey mud & fine sand*

Direction of surface current, *Word N 3/4 E Force 2*

Drift
Force of surface current, *N W 3/4*

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

1109

REMARKS.

Specific Gravities

Surface 1.0243 66

5 fms 43 66

10 fms 44 68

Trawl over 8.00 down 8.10

heaving in 8.40 up 8.50

250 fms out

TEMPERATURE RECORD.

Instrument used, *Trawl*
Current number of observation, *1109*
Date, *Aug. 22. 1882*
Locality, *Off Martha's Vineyard*
Bearings, *Lat. 43°-08' N*
Long 70°-38' W
Time of day, *17.55* ; of tide,
State of sky, *b c*
Temperature of air, *78 1/2*
“ surface of water, *71*
“ at depth of fathoms,
“ of bottom, *29*
Depth, in fathoms, *89*
Nature of bottom, *Gray sand*
Direction of surface current, *Drift* *Wind* *with force 2*
N. N. W. 1'
Direction of bottom current,
Force of bottom current,
Name of vessel,
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

1110

REMARKS.

Spec. Grav.

Surface	1.0235	72
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5 fms	85	72
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10 "	87	71
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Travel over 9.25 down 9.35
 heaving in 10.05 up 10.18
 900 fms out

TEMPERATURE RECORD.

Instrument used, *Trawl*
 Current number of observation, *1110*
 Date, *Aug 22 1882*
 Locality, *Off North's Key*
 Bearings, *Lat. 40°-52' N*
Long. 78°-35' W
 Time of day, *9.16* ; of tide.
 State of sky, *bc*
 Temperature of air, *75*
 " surface of water, *72*
 " at depth of _____ fathoms,
 " of bottom, *47*
 Depth, in fathoms, *110*
 Nature of bottom, *green mud & fine sand*
 Direction of ~~surface~~ ^{wind} current, *N force 2*
 Force of ~~surface~~ ^{Drift} current, *N x W 1/2 W 1'*
 Direction of bottom current,
 Force of bottom current,
 Name of vessel,
 To what service attached,
 Name and rank of commanding officer,
 Name and position of observer,

1111

REMARKS.
Spec. Grav.

Surface	1.0289	71
5 fms	40	70
10 fms	40	72
Trawl over 10.55 down 10.57		
heaving in 11.30 up 11.40		
377 fms out.		

TEMPERATURE RECORD.

Instrument used, *Deep Sea Trawl*

Current number of observation, *1111*

Date, *Aug. 22 1882*

Locality, *Off Martha's Vineyard*

Bearings, *Lat 41° 01' 33" N*

Long 70° - 35' W

Time of day, *10.43* ; of tide,

State of sky, *bc*

Temperature of air, *76*

" surface of water, *72 1018 = 48402*

" at depth of *3* fathoms, *71*

" of bottom, *47*

Depth, in fathoms, *224*

Nature of bottom, *fine sand*

Direction of ~~surface~~ *wind* current, *N.E. force 2*

Force of ~~surface~~ *Drift* current, *N.N.E. 1/2 E. 1"*

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

1112

REMARKS.

Spec. Grav.

Surface	1.0220	69
5 fms	41	70
10 fms	40	69

Travel over 12.55 down 1.05-
 leaving in 1.30 up 1.45-
 490 fms. out

TEMPERATURE RECORD.

Instrument used, *Deep Sea Trawl*
 Current number of observation, *1112*
 Date, *Aug 22 1882*
 Locality, *Off Martha's Vineyard*
 Bearings, *Latitude 39° - 36' N*
Long. 70° - 35' W
 Time of day, *12.43* ; of tide,
 State of sky, *b.c.*
 Temperature of air, *72*
 " surface of water, *72*
 " at depth of *5* fathoms, *72. 10 fms 65*
 " of bottom, *43*
 Depth, in fathoms, *245*
 Nature of bottom, *green mud & sand*
 Direction of ~~surface~~ *Wind* *NW x N 1'*
 Force of ~~surface~~ *Drift* *N. W. x N 1'*
 Direction of bottom current, *Temperature at 20 fms 49*
 Force of bottom current,
 Name of vessel,
 To what service attached,
 Name and rank of commanding officer,
 Name and position of observer,

1113

REMARKS.

Spec. grav.

Surface 1.0240 68

5 fms 40 70

10 " 41 70

Trawl over 1.54 down 2.08

heaving in 2.25 up 2.40

375 fms. out

TEMPERATURE RECORD.

Instrument used, *Deep Sea Trawl*
 Current number of observation, *1113*
 Date, *Aug. 22 1882*
 Locality, *off Martha's Vineyard*
 Bearings, *Lat. 39°-57' N*
Long. 70°-30' W
 Time of day, *1.45* ; of tide,
 State of sky, *bc*
 Temperature of air, *75*
 " surface of water, *72*
 " at depth of *5* fathoms, *71 1/2* fms *69 1/2*
 " of bottom, *48*
 Depth, in fathoms, *192*
 Nature of bottom, *green mud*
 Direction of ~~surface~~ *Wind* current, *N.E. force 2*
~~Force of surface current,~~ *Drift* *North 1'*
 Direction of ~~bottom~~ *Temperature at 20 fms* current, *49*
 " " *30 " 46*
 Force of bottom current,
 Name of vessel,
 To what service attached,
 Name and rank of commanding officer,
 Name and position of observer,

1114

REMARKS.

Trawl over 2.48 down 2.55-
heaving in 3.16 up 3.28
300 fms out

TEMPERATURE RECORD.

Instrument used, *Deep Sea Trawl*

Current number of observation, *1114*

Date, *Aug. 22 1882*

Locality, *Off Martha's Vineyard*

Bearings, *Latitude 38°-35' N*
Long 70°-38' W

Time of day, *2.40* ; of tide.

State of sky, *bc*

Temperature of air, *74*

" surface of water, *72*

" at depth of *5* fathoms, *71 1/2* *10 fms 63*

" of bottom, *43*

Depth, in fathoms, *101*

Nature of bottom, *green mud*

Direction of surface current, *Wind N.E. force 2*

Force of surface current, *Drift 1 x 12 1'*

Direction of bottom current, *Temperature at 50 fms 49°*

Force of bottom current, *Temperature " 50 " 49°*

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

1 fathom Thermometer
X 123 # 47998

1115

REMARKS.

Dredge over 3.35 down 3.44
heaving in 4.11 up 4.20
275 fms out
No fish.

TEMPERATURE RECORD.

Instrument used, *Poke Dredge*
 Current number of observation, *1113*
 Date, *Aug. 22 1882*
 Locality, *Off Martha's Vineyard*
 Bearings, *Lat. 39° - 59' N*
Long. 78° - 41' W
 Time of day, *5.28 P.M.* of tide,
 State of sky, *bc*
 Temperature of air, *75*
 " surface of water, *72 1/2*
 " at depth of *5* fathoms, *72* *16 fms* *70*
 " of bottom, *45*
 Depth, in fathoms, *146*
 Nature of bottom, *green mud & sand*
 Direction of surface current, *Wind*
Drift *N.E. force 2*
~~Force of surface current,~~ *N x E 3/4*
 Direction of bottom current,
 Force of bottom current,
 Name of vessel,
 To what service attached,
 Name and rank of commanding officer,
 Name and position of observer,

11/16

REMARKS.

Trave over 4.26 down 4.33
leaving in 4.53. up 5.01
3.02 fine out

At 5.03 got sounding in
143 fms.

TEMPERATURE RECORD.

Instrument used, *Trawl*

Current number of observation, *1116*

Date, *Aug. 22 1882*

Locality, *off Martha's Vineyard*

Bearings, *Lat. 39° 59' N*

Long. 70° 24' W

Time of day, *4.20* ; of tide,

State of sky, *b.c*

Temperature of air, *77*

" surface of water, *72*

" at depth of *5* fathoms, *72 15 fms 68*

" of bottom, *416*

Depth, in fathoms, *144*

Nature of bottom, *hard sand & green mud*

Direction of ~~surface~~ *Wind* current, *S.E. force 2*

Drift
Force of surface current, *1/2 N.W. 1/2 W 1'*

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

1117 REMARKS.

Travel over 5.37 down 5.41
 leaving in 6.08 up 6.12
 240 fms out

TEMPERATURE RECORD.

Instrument used, *Trawl*
Current number of observation, *1117*
Date, *Aug. 22 1882*
Locality, *off Martha's Vineyard*
Bearings, *Lat. 40° - 02' N*
Long 70° - 45' W
Time of day, *2.30* ; of tide,
State of sky, *bc*
Temperature of air, *78*
" surface of water, *72*
" at depth of *5* fathoms, *72* *11 fms 62*
" of bottom, *48*
Depth, in fathoms, *89*
Nature of bottom, *fine sand*
Direction of surface current, *W. Force 3*
Drift *N E 1'*
~~Force of surface current.~~
Direction of bottom current,
Force of bottom current,
Name of vessel,
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

1118

REMARKS.

Trawl over 6.25 down 6.30
heaving in 6.33 up 6.40
240 fms. out

TEMPERATURE RECORD.

Instrument used, *Trawl*

Current number of observation, *1118*

Date, *Aug 22 1882*

Locality, *off North's Vineyard*

Bearings, *Lat 40° 03' N*
Long. 70° - 43' W

Time of day, *6.20 P.M.* of tide,

State of sky, *bc*

Temperature of air, *74*

" surface of water, *72*

" at depth of fathoms,

" of bottom, *49*

Depth, in fathoms, *70*

Nature of bottom, *fine sand*

Direction of ~~surface current~~ *Wind N force 2*

~~Force of surface current~~ *Drift N. N. W 1/4"*

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

1177
REMARKS.

Trawl over 6.37 down 6.41
heaving in 7.22 up 7.22
215 fms. out.

At 5.22 got sounding in 56 fms.

Large Neptunia decemcostata.

Archaster Americanus

TEMPERATURE RECORD.

Instrument used, *Trawl*

Current number of observation, *1119*

Date, *Aug. 26 1882*

Locality, *off Nantucket*

Bearings, *Lat. 43° 08' N*
Long. 68° 45' W

Time of day, *6.32 A.M.*

State of sky, *b.c.*

Temperature of air, *68*

" surface of water, *65*

" at depth of *5* fathoms, *65*

" of bottom, *48*

Depth, in fathoms, *97*

Nature of bottom, *sand & broken shells*

Direction of ~~surface current~~ *Wind N.E. force 3*

~~Force of surface current~~ *Drift N.E. 1/2 N 3/4*

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

1120

REMARKS.

Travel over 7.58 down 8.03
leaving in 8.30 up 8.45

Lot of *Astrophyton Samarekii*
not before taken by us.

Bolium Bairdii, frag.

Neptunia decemcostata

Sipho Stimpsoni

Buccinum undatum

Sipho pubescens

Addisoria paradoxa

Doris complanata

Hyalinoccia artifex

Reploteraster multipes

Pilissopsis lyngbya

Bolocera Fendia

Porania spinulosa

Archaster Agassizii

TEMPERATURE RECORD.

Instrument used, *Trawl*
Current number of observation, *1120*
Date, *Aug. 26 1882*
Locality, *off Nantucket*
Bearings, *Lat 40° - 05' N*
Long. 68° - 48' W
Time of day, *7 42 A.M.* of tide,
State of sky, *bc*
Temperature of air, *69*
" surface of water, *65*
" at depth of *5* fathoms, *65*, at *10 56*
" of bottom, *43 1/2*
Depth, in fathoms, *194*
Nature of bottom, *fine sand & stones*
Direction of ~~surface current~~, *Wind NNE. force 9*
Drift
Force of ~~surface current~~, *N.W. 1 1/2*
Direction of bottom current,
Force of bottom current,
Name of vessel,
To what service attached,
Name and rank of commanding officer,
Name and position of observer,

1121

REMARKS.

Trawl over 9.18 down 9.28
 heaving in 9.48 up 10.05
 550 fms. out.

Large lot *Ophiacantha*
millespina
Bolocera Thuidiae lot.
Ayalinocia artifer "
Dolium Bairdii frag.
Pecten vitreus
Urticina callosa
Paramuricea borealis
Anledum dentatum.
Porania grandis. 1 very
 large. Taken home alive
Solaster Earllii. large
Lophaster fuscifer
 (very rare) This ant
 last not taken in
 this region before

TEMPERATURE RECORD.

Instrument used,

Therm

Current number of observation,

1121

Date,

Aug 26 1882

Locality,

Off Nantucket

Bearings,

Lat. $40^{\circ}-04' N$

Long. $68^{\circ}-49' W$

Time of day,

9.55 AM of tide,

State of sky,

bc

Temperature of air,

65

"

surface of water,

65

"

at depth of

5

fathoms,

64

10 fms

86

"

of bottom,

41 1/2

Depth, in fathoms,

294

Nature of bottom,

fine sand & fossil stones

Direction of ~~surface current~~,

Wind

NNE

force 4

Force of ~~surface current~~,

Drift

N-NW

1'

Direction of bottom current,

Force of bottom current,

~

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

REMARKS.